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EXAMINER

BENGZON, GREG C

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,614

Applicant(s)

GEBHARDT ET AL.

Examiner

Greg Bengzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been examined. Claims 1-41 are pending.

#### ***Priority***

This application is a continuation-in-part of a prior application. This application claims benefits of priority from parent application 09/333724 filed on June 15, 1999.

The effective date of the claims in this application is June 15, 1999.

#### ***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on the following dates - 03/07/2002, 09/09/2002, 03/21/2002, were filed after the mailing date of the application on April 25, 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-13, 17-30, 33-36, 40-41 rejected under 35 U.S.C. 103(a) as being unpatentable over Howe et al. (US Patent 6502242) hereinafter referred to as Howe, in view of Filepp et al. (US Patent 6195661), hereinafter referred to as Filepp.

With respect to Claim 1, Howe discloses a computer implemented method of updating an interactive application broadcast from a broadcast system to a reception device over a transmission medium, ( Cx 18 Lx 20-60, Cx 15 Lx 10-60) the method comprising: receiving at the broadcast system a broadcast signal including at least one information of a first interactive application; selecting a second interactive application, and broadcasting information of the second interactive application to the reception device in place of at least some of the information of the first interactive application, for execution of the second interactive application by the reception device; receiving at the broadcast system in the broadcast signal additional information regarding the first interactive application; and broadcasting from the broadcast system selected additional information to the reception device, for execution of the second interactive application in conjunction with the additional information. (Figure 1, Figure 6, Figure 10, Cx 19 Lx 25-55)

With respect to Claim 2, h1 discloses the method of claim 1, wherein the second interactive application is a customized version of the first interactive application. (Cx 3 Lx 55-60, Cx 7 Lx 40-45, Cx9 Lx 50-65)

With respect to Claim 3, h1 discloses the method of claim 1, wherein the first interactive application is broadcast over a first transport protocol, and the second

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interactive application is broadcast over a second transport protocol. (Cx 3 Lx 55-60, Cx 7 Lx 40-45, Cx9 Lx 50-65)

With respect to Claim 4, h1 discloses the method of claim 1, wherein the first interactive application is broadcast, over an analog transport protocol, and the second interactive application is broadcast over a digital transport protocol. (Cx 3 Lx 55-60)

With respect to Claim 5, h1 discloses the method of claim 4, wherein the analog transport protocol is the vertical blanking interval of an analog broadcast television signal. (Cx 3 Lx 55-60)

With respect to Claim 6, h1 discloses the method of claim 4, wherein the digital transport protocol is an MPEG signal. (Cx 9 Lx 50-65)

With respect to Claim 9, h1 discloses The method of claim 4, wherein broadcasting the additional information to the reception device further comprises converting the updated information from a format compatible with the analog transport protocol to a format compatible with the digital transport protocol. (Cx 8 Lx 1-30, Cx 10 Lx 10-20)

With respect to Claim 10, h1 discloses the method of claim 1, wherein broadcasting selected updated additional information to the reception device further

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comprises: selecting an additional information that is an update of a corresponding information of the second interactive application. (Cx 25 Lx 20-25, Cx 26 Lx 40-50)

With respect to Claim 11-13, h1 substantially discloses the method of claim 10, wherein additional information that is an update of the corresponding information of the second interactive application is received and broadcast. (Cx 25 Lx 20-25, Cx 26 Lx 40-50)

With respect to Claim 17, h1 discloses the method of claim 1, further comprising: receiving at the broadcast system in the broadcast signal, control information for controlling execution of the second interactive application at the reception device; and broadcasting the control information to the reception device. (Cx 21 Lx 20-65, Cx 19 Lx 25-60)

With respect to Claim 18, h1 discloses a system for updating an interactive application broadcast from a broadcast system to a reception device over a transmission medium, the system comprising: a code detector adapted to receive a broadcast signal and identify codes in the signal that relate to a change in a state of a first interactive application, and that provides outputs signals indicative of the change of state (Cx 18 Lx 40-50, Cx 10 Lx 10-20); a server that maintains state information for the first interactive application in response to the output signals from the code detector, and in response to the state of the first interactive application, outputs commands to start or stop the output of updated information of the interactive application; a code reader,

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adapted to read interactive application codes of an interactive application and to identify information of the first interactive application that are updates of corresponding information of a second interactive application stored a broadcast server, and communicatively coupled to the server, that selectively provides the updated information to the broadcast server in response to the commands from the server (Cx 18 Lx 40-50) ; and a broadcast server that broadcasts the second interactive application to reception devices for execution by the reception devices in place of the first interactive application, and selectively broadcasts the updated information to the reception devices, for execution of the second interactive application in conjunction with the updated information. (Figure 1, Figure 6 Items 8 Item 9, Figure 10, Cx 18 Lx 20-60, Cx 15 Lx 10-60, Cx 17 Lx 20-40) Examiner notes that the content provider (Item 41 and 42 ) is able to communicate directly with network service provider (Item 10) and hence also with STB (Item 100).

With respect to Claim 19, h1 discloses the system of claim 18, wherein the code detector identify codes that relates to a change in the state of an interactive application by detecting changes in an interactive application identification code. (Cx 4 Lx 20-30, Cx 18 Lx 1-15)

With respect to Claim 20, h1 discloses the system of claim 18, wherein the code detector identifies codes that relate to a change in the state of an interactive application

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by detecting a new interactive application identification code. (Cx 12 Lx 20-25, Cx 17 Lx 20-65)

With respect to Claim 21, h1 discloses the system of claim 20, wherein the server in response to an output signal of the code detector indicating a new interactive identification code, commands the code reader to start providing updated information to the broadcast server. (Cx 25 Lx 20-35)

With respect to Claim 22, h1 discloses the system of claim 18, wherein the code detector identifies codes that relate to a change in the state of an interactive application by detecting an absence of an interactive application identification code in the broadcast signal for a predetermined amount of time. (Cx 8 Lx 1-65, Cx 15 Lx 25-30, Cx 25 Lx 20-35)

With respect to Claim 23, h1 discloses the system of claim 22, wherein the server in response to an output signal of the code detector indicating an absence of the interactive identification code for the predetermined time, commands the code reader to stop providing updated information of the second interactive application to the broadcast server. (Cx 8 Lx 1-65, Cx 17 Lx 25-30, Cx 18 Lx 20-30, Cx 19 Lx 30-50, Cx 25 Lx 20-35)

With respect to Claim 24, h1 discloses the system of claim 18, wherein the code reader caches updated information prior to receiving a command from server to provide



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updated information to the broadcast server. (Figure 6, Cx 18 Lx 20-60, Cx 19 Lx 30-50, Cx 20 Lx 1-40)

With respect to Claim 25, h1 discloses the system of claim 18, wherein the code detector detects commands for controlling execution of the first interactive application in a preserved portion of the broadcast signal, and the code reader provides the commands to the broadcast server for broadcasting to the reception device. (Cx 8 Lx 1-65, Cx 17 Lx 25-30, Cx 18 Lx 20-65, Cx 19 Lx 30-50, Cx 25 Lx 20-35)

With respect to Claim 26-30 and Claims 33-36 the applicant discloses substantially the same limitations as described in Claims 1-17. Claim 26-30 and Claims 33-36 are rejected on the same basis as Claims 1-17.

With respect to Claims 40-41 the applicant describes a computer implemented method and computer readable medium with the same limitation as Claim 1. Claims 40-41 are rejected on the same basis as Claim 1.

However with respect to Claims 1-6, 9-13, 17-30, 33-36, 40-41, while h1 discloses providing update information to the second interactive application, h1 does not disclose the method of storing and updating records for the interactive applications. With respect to Claims 10-13 and Claims 22-25 H1 does not disclose the method

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wherein selecting an additional record that is an update of a corresponding record of the second interactive application further comprises: storing for each record of the first interactive application a current sequence number; determining whether a sequence number for a received additional record of the first interactive application exceeds the current sequence number for the record; and responsive to the determination that the sequence number exceeds the stored sequence number, selecting the additional record, and adjusting the stored sequence number for the additional record to the received sequence number. H1 does not disclose the method wherein broadcasting a selected additional record to the reception device further comprises: broadcasting an updated additional record only if the additional record is compatible with a corresponding record in the second interactive application. Furthermore, while h1 discloses of storing the updates in various types of memory storage of the interactive server, h1 does not specifically mention the concept of caching records.

F1 discloses a method for locating and updating application records in an interactive-services database, wherein the information on the interactive application is broken down into objects and elements, with each object record header providing data regarding the objects identification, anticipated use, association to other objects, its length, its version and its currency. (Cx 6 Lx 40-50, Cx 11 Lx 1-10, Cx 12 Lx 50-55, Cx 13 Lx 30-35, Cx 26 Lx 60-65) F1 discloses of an object interpreter and object processor that determines whether the received update object is of a certain type and will look for the matching object on the database, thereby ensuring compatibility of the updates

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records. (Cx 25 Lx 55-65, Cx 26 Lx 1-65) F1 discloses the concept of caching update records (Cx 27 Lx 20-65).

H1 and f1 are analogous art because they both present concepts and practices regarding delivery of content for interactive applications over broadcasting networks. It is respectfully suggested that it would have been obvious to a person of ordinary skill in the art to combine the teachings of f1 with regards to locating, object type matching, version checking, currency checking, caching and updating interactive application records into the methods of h1. The suggested motivation would be, as f1 suggests, so that the network can supply information and transactional support to the user at minimal cost with a minimal response time.

Therefore it would have been obvious to combine the teachings of f1 into the method of h1 in order to arrive at the invention as described in Claims 1-6, 9-13, 17-30, 33-36, 40-41.

Claims 14-16, 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howe et al. (US Patent 6502242) hereinafter referred to as Howe, in view of Filepp et al. (US Patent 6195661), hereinafter referred to as Filepp, further in view of Chen et al. (US Patent 6269374), hereinafter referred to as Chen.

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With respect to Claims 14-16 and Claims 37-39, the combined teachings of h1 and f1, when applied together, are enough to disclose the invention as described by the applicant.

However the combined teachings of h1 and f1 do not disclose matching a first checksum of the non-content portions of the additional records of the first interactive application with a first checksum on the non-content portions of the corresponding records containing variable content. The combined teachings of h1 and f1 do not disclose matching a second checksum of static portions of records of the first interactive application with a second checksum of static portions of records of the second interactive application.

C1 discloses a method and apparatus for calculating checksums of data structures. C1 teaches that it is advantageous to calculate the checksum using the static portion of the data structure, and also calculate a separate checksum for the variable contents of the data structure. (Figure 4, Cx 1 Lx 35-45, Cx 2 Lx 30-35, Cx 5 Lx 40-65, Cx 6 Lx 20-65)

H1, f1 and c1 are analogous art because they present concepts and practices regarding content delivery for interactive applications. It is respectfully suggested that it would have been obvious to a person of ordinary skill in the art to combine the teachings of c1 with regards to calculating checksums for interactive application records into the combined methods of h1 and f1. The suggested motivation would be, as c1 suggests, so that the checksum methods may be used for error checking may be implemented without degradation in quality of service. (Cx 2 Lx 10-20, Cx 9 Lx 30-40)

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Therefore it would have been obvious to combine the teachings of c1 into the combined method of h1 and f1 in order to arrive at the invention as described in Claims 14-16 and Claims 37-39.

Claims 7,8,31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howe et al. (US Patent 6502242) hereinafter referred to as Howe, in view of Filepp et al. (US Patent 6195661), hereinafter referred to as Filepp, further in view of Wistendahl (US 6496981 B1), hereinafter referred to as Wistendahl.

With respect to Claims 7,8,31 and 32, the combined teachings of h1 and f1, when applied together, are enough to disclose the invention as described by the applicant.

However the combined teachings of h1 and f1 do not disclose the method of using a digital transport protocol consisting of an ATVEF or HTTP signal.

W1 discloses a system for converting media content for interactive TV , wherein the system is able to accept HTTP or HDTV signals. (Cx 1 Lx 45-60, Cx 3 Lx 30-40).

H1, f1 and w1 are analogous art because they present concepts and practices regarding content delivery for interactive applications. It is respectfully suggested that it would have been obvious to a person of ordinary skill in the art to combine the teachings of w1 with the combined methods of h1 and f1 in order to accept HTTP or

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HDTV signals for the interactive applications. The suggested motivation would be, as w1 suggests, so that media content is converted for interactive TV use without locking it in to any particular delivery system or display platform. (Cx 2 Lx 30-40)

Therefore it would have been obvious to combine the teachings of w1 into the combined method of h1 and f1 in order to arrive at the invention as described in Claims 7,8,31 and 32.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclose PTO-892 form.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571)272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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